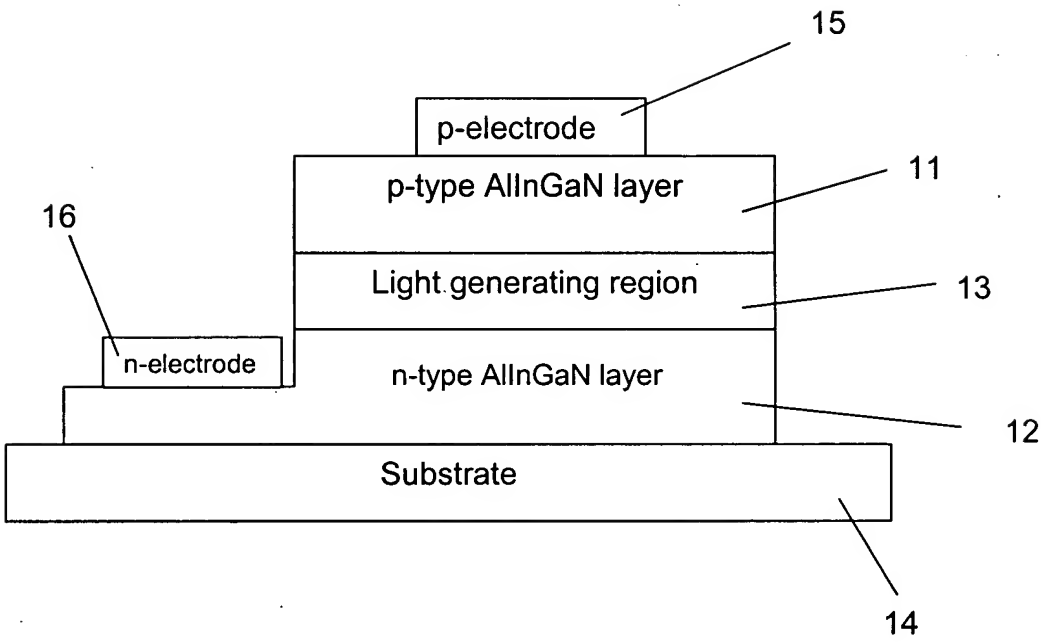

FIGURE 1

(Prior Art)

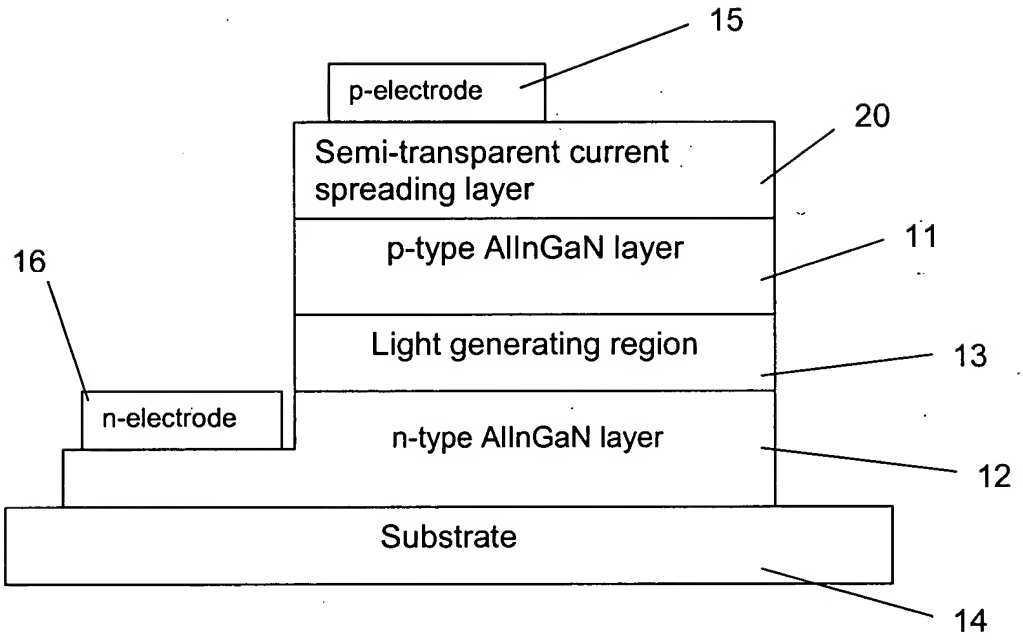

FIGURE 2

(Prior Art)

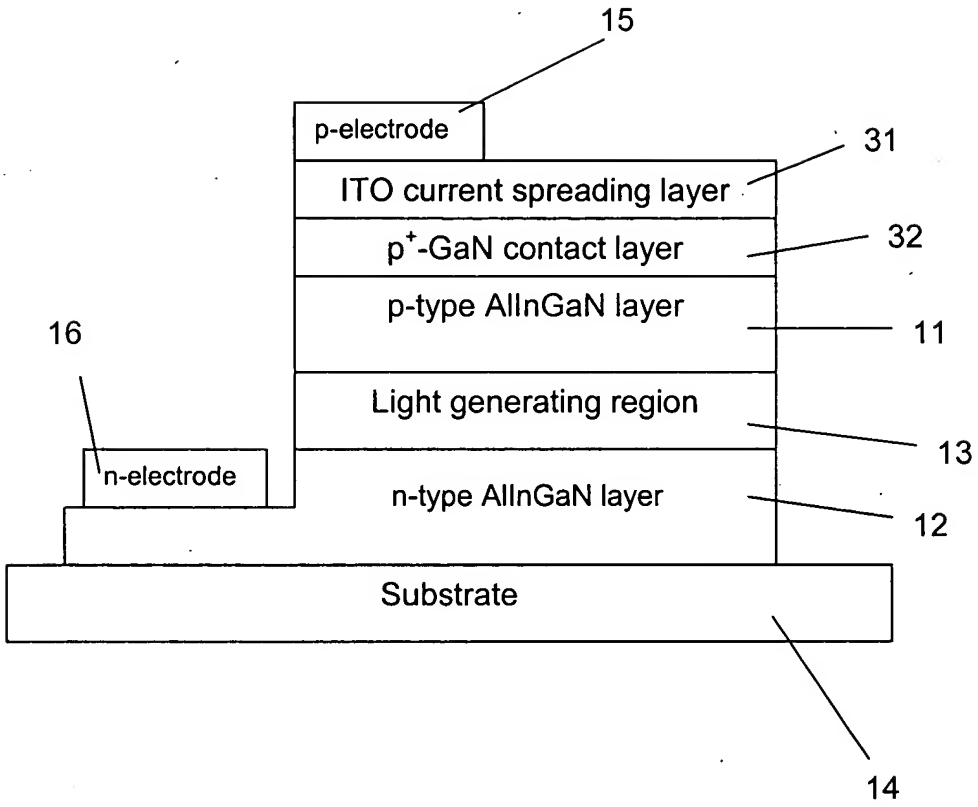

FIGURE 3

(Prior Art)

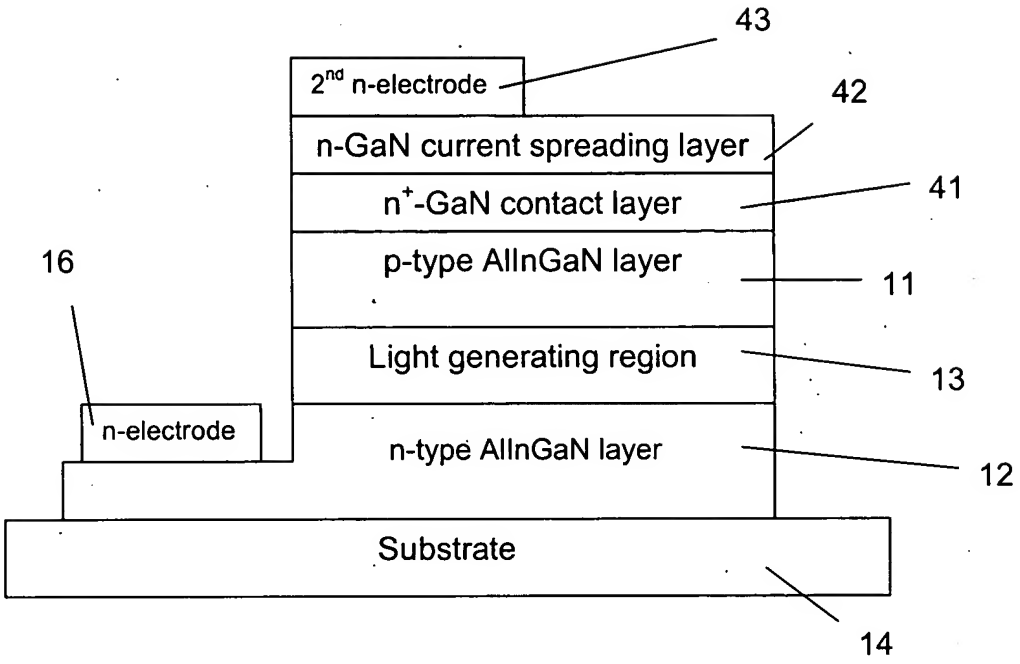

FIGURE 4

(Prior Art)

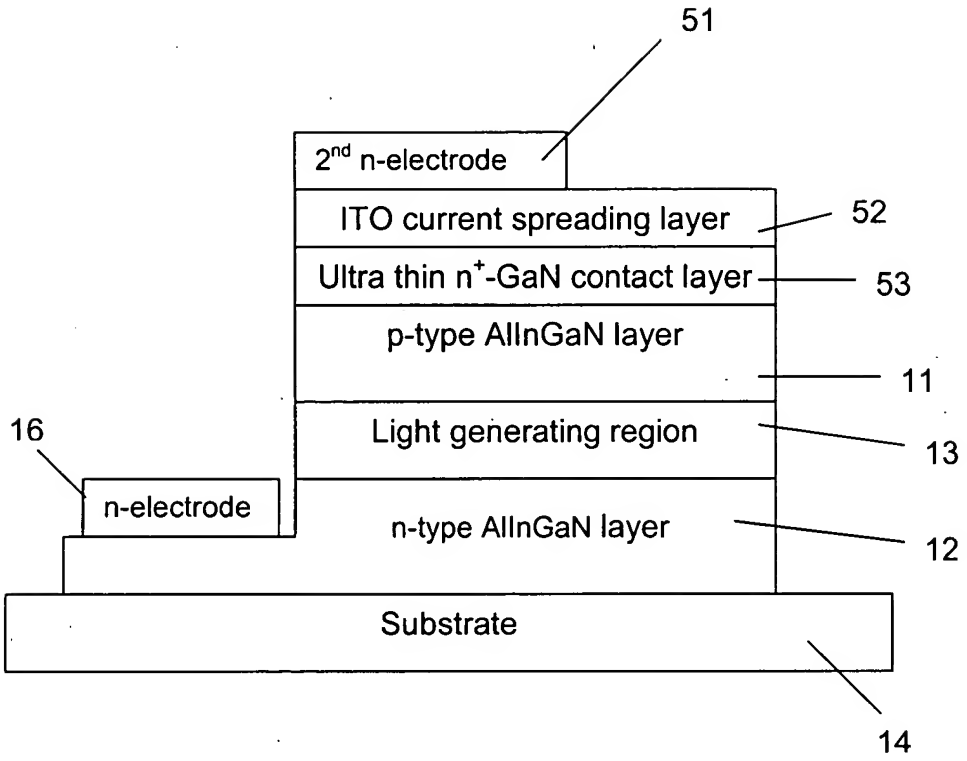
51
2nd n-electrode
ITO current spreading layer
52
Ultra thin n+-GaN contact layer
53
p-type AlInGaN layer
11
16
Light generating region
13
n-electrode
n-type AlInGaN layer
12
Substrate
14

FIGURE 5

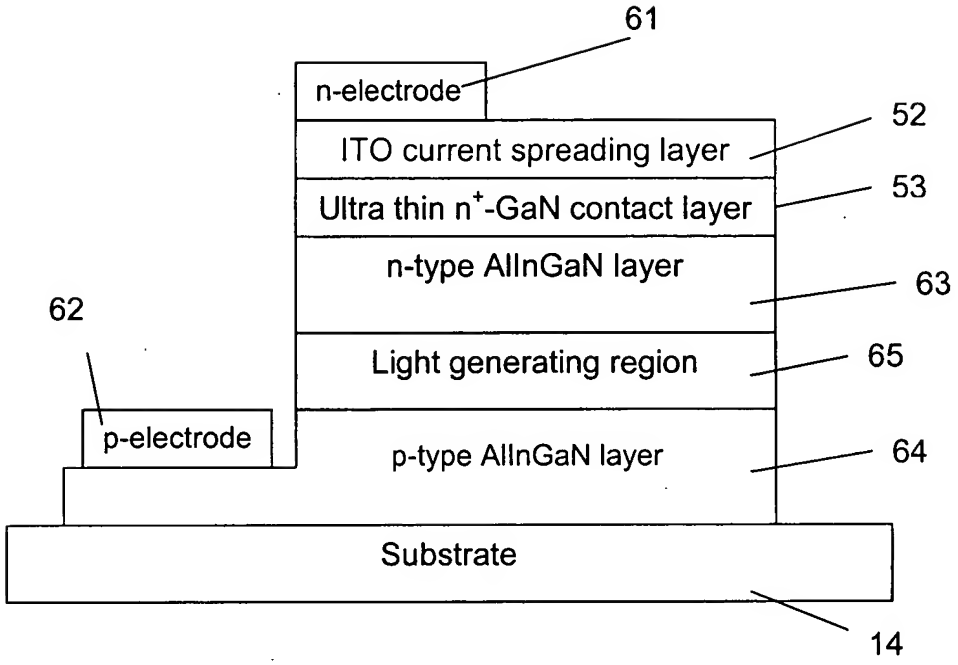
61
n-electrode
52
ITO current spreading layer
53
Ultra thin n+-GaN contact layer
n-type AlInGaN layer
63
62
Light generating region
65
p-electrode
p-type AlInGaN layer
64
Substrate
14

FIGURE 6